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## 4-H Club Baby Beef Manual : Extension Circular 2-61-2

Walter Tolman

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EXTENSION CIRCULAR 2-61-2



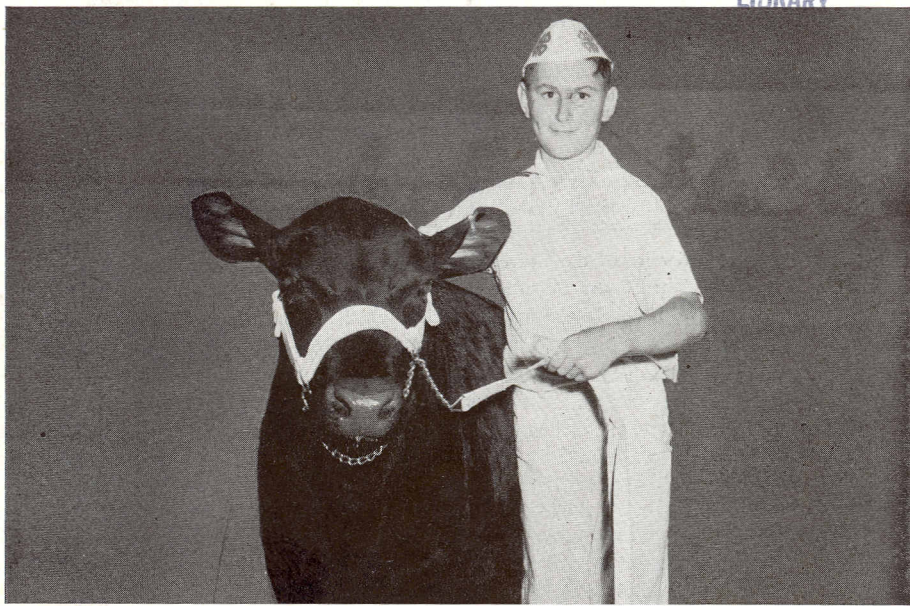
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# 4-H Club BABY BEEF Manual

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## SUGGESTED PLAN OF STUDY

	Pages
First Meeting: Purpose of the Baby Beef Club.....	3- 6
Second Meeting: Selecting a Calf.....	6- 9
Third Meeting: Starting a Calf on Feed.....	9-10
Fourth Meeting: Further Feeding Problems.....	10-11
Fifth Meeting: Summer Care .....	11-12
Sixth Meeting: Diseases and Parasites.....	12-14
Seventh Meeting: Training and Fitting.....	14-17
Eight Meeting: Showing and Marketing.....	17-20

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EXTENSION CIRCULAR 2-61-2

NOVEMBER, 1941

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# Baby Beef Manual

WALTER TOLMAN

THE SALE of beef cattle accounts for about one-fourth of Nebraska's farm income and yet a surprisingly large percentage of the cattle marketed are not of high quality, either because they are improperly bred or improperly fed. It is to be expected that the dairy industry should supply a considerable amount of relatively low-grade beef. Many cattle on the market are purely nondescript animals, however, so far as breeding is concerned, and often in such thin flesh as to be usable only for the cheaper grade of products. Not only do such cattle bring a small return to the producer but forcing this low-quality beef on the market turns a certain number of consumers away from beef as a food.

## Nebraska Can Produce Choice Beef

Nebraska stands high in its reputation for production of choice beef. No other market has a higher percentage of choice beef than the Omaha market, receipts of which come largely from Nebraska. The 4-H baby beef club affords young farmers an opportunity to learn the principles of selection, feeding, and marketing choice cattle. High-quality feeder calves are purchased in the fall and fed for a fall market. This method of feeding is very conservative for several reasons: (1) since calves rather than older cattle are bought, the feeding period is necessarily long and skill in feeding becomes more important than buying low and selling high; (2) calves make greater gains on the feed consumed than do older cattle; (3) in the fall months we usually have the highest market of the year for choice grain-fed cattle; and (4) as a boy continues in baby beef work from year to year he will be buying his feeder calves at about the same season he markets last year's beef, thereby minimizing the risk incurred from rising and falling markets.

## Why Clubs?

Club lessons are based on experimental work and on the experience of successful farmers. The advice of the club leader and the county agent makes it possible for a club member to profit from the experience of others instead of learning entirely in the "school of hard knocks." The regular club meetings provide an opportunity to talk over the problems and experience of the members. Training in livestock judging as a part of club work is a big help in selecting the correct feeder type as well as judging the finished steer. One of the essential parts of baby beef club work is record keeping. Accurately kept records make possible a very valuable study of different feeding and management practices. Through discussion and observation in the club each member has the opportunity of gaining knowledge from the other boys' feeding as well as profiting from his own experience.

While a club leader with considerable experience in feeding may find the responsibilities of leadership somewhat more simple than if he did not have this background, actual cattle-feeding experience is not necessary for a good 4-H beef club leader. The biggest opportunities of the leader are to help



acquaint the club members with the true possibilities of the project. The lesson material and the advice of the county agent, supplemented by the experience of the fathers and cattlemen in the neighborhood, will make available all of the feeding information needed.

### A Market For Feed

Baby beef work and cattle feeding should be regarded as a means of marketing products of the farm. Every farm produces a considerable amount of rough feed and pasture which would be worthless unless fed to livestock. Eighty-seven per cent of Nebraska's farm land is given over to the production of pasture and feed grains. Occasionally the cash market for corn, barley, sorghum, or other feed grains may be higher than these crops would return through livestock. Over a long period of time, however, livestock feeding brings a return sufficient to pay for the feed, labor, and risk, and compensates the feeder for his foresight. In addition to this, feeding crops on the farm helps to maintain fertility and production.

Baby beef club work has done a great deal towards fixing in the minds of both farmer and rancher the correct feeder type—a thick, smooth, early-maturing calf (Fig. 1). This project has been valuable to the farmers of Nebraska in pointing out the advantages of the practice of feeding choice calves for a fall market. Nebraska will undoubtedly be producing a greater amount of roughage during the coming years, as a means of soil conservation. 4-H beef club work has an opportunity of demonstrating to the adults in every community the possibility of profitably marketing roughage through cattle.

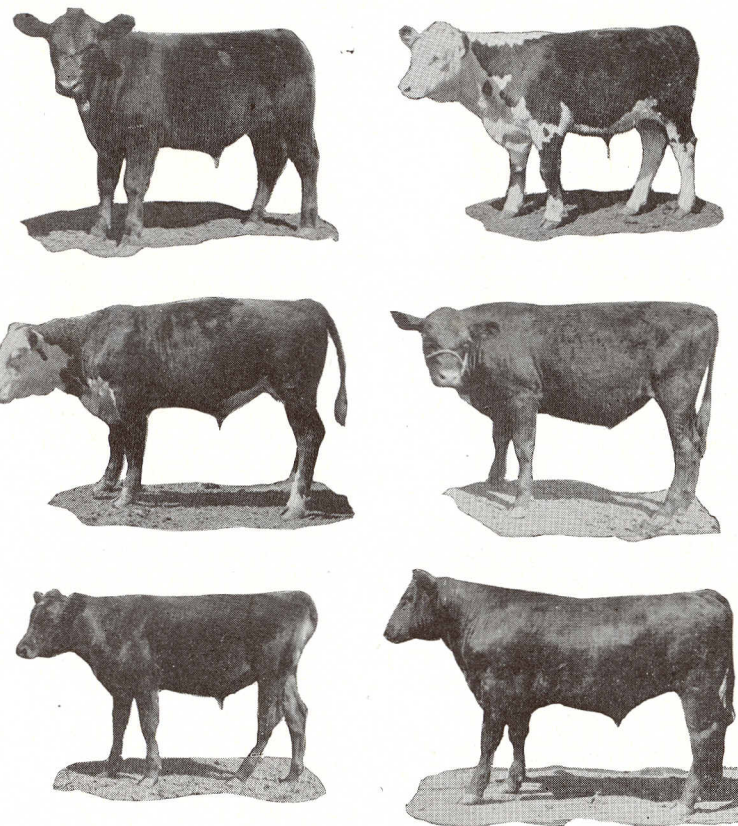
### Shows

Various shows have been provided as a means of exhibiting baby beef calves of outstanding market quality. These shows afford an opportunity for club members to become acquainted with one another and to exchange experiences. They are valuable in fixing in the minds of club members and adults the correct type and condition of prime beef animals. Exhibition of prize-winning animals should never be considered the final goal of baby beef work. The biggest opportunity is in learning the lessons of economical and profitable beef production. The information and experience gained should become the foundation for commercial operations when these boys start farming for themselves.

The experience of a boy in a club can hardly be considered complete unless showing is a part of it. However, our state and district shows probably have their greatest value if they are retained largely for the exhibit of winning calves at local shows, especially those exhibited by club members of several years' experience. The purchase of high-priced and extremely promising calves is in no way an assurance of winning at shows. The proper feeding and development of the calf, fitting him for show, and showing him in the ring are fully as important as the individuality of the feeder calf.

The object of the beef club is to feed good beef calves in a practical and profitable manner. Boys and girls who have been in the work several years may enjoy the keen competition of the big shows and wish to attempt to produce a winning calf. This is a natural outlet for the thought and energy of ambitious young people and not to be condemned among club members well trained in more conservative feeding. The beginner should not be car-

ried away by such plans and hopes. He had better start with a good practical kind of calf bought at a price to assure a profit and from year to year buy better calves as his judgment in selection and experience in feeding and showing justify it.



*At the top are two very good 4-H feeder calves. The Hereford is a little too long necked. At the left center is a cull feeder, too large and old for a 4-H calf, high in the flank, light in the round, crooked on the hind legs, lacking in depth of body and straightness of line. At the right is one too old and large, very poorly developed in the rear end. The calf at lower left lacks natural beefiness, is plain in quality, high at the tail head, and lacking in thrift. At the right is a medium feeder type, too old, fed too long to make the most economical gains, a little crested and heavy shouldered, indicating he may not have been castrated soon enough. NEVER buy a staggy calf.*

### A Calf To Be Proud Of

On the other hand rough, common calves, those showing dairy breeding, or runty, unthrifty stock have no place in baby beef work. In most cases it is a waste of feed to give it to animals which can never make good beef.



In some cases these low-grade cattle show a profit on a short feed and with a rising market. However, speculation as to such a profit should be left to older people prepared to stand a possible loss which might completely dishearten a boy or girl.

The fall market is ordinarily highest for choice, well finished cattle. Cattle not so desirable in type or finish sell relatively lower in the fall than they do in the spring. For this reason low-quality calves should never be fed in baby beef work and also for this reason 4-H calves should be well finished before they go to market. Even though calves are of excellent breeding and type, they must sell at about the same price as well-bred grass-fat cattle from the range which have been produced at far lower cost.

### Beef Type

A naturally thick-fleshed beefy calf should be selected. Look down the calf's back and pick one which is wide and thick over the crops and loin and carries down deep and plump in the round. The general shape or type should be short and wide with straight lines. Short legged, short thick necked, short deep bodied calves have the thick muscling the packers want. Baby beef production requires an early-maturing type of calf. He should be smooth turned, rounded, and somewhat plump in outline. Probably no other mistake in selection results in so many disappointed 4-H feeders each year as the one of selecting a big-boned, rough, angular calf just a little long legged and long bodied. The reason for this mistake is usually the idea that such a calf will grow faster and require less feed than the smooth, early-maturing sort. Big, rugged calves may make a little the most economical gains but the lower selling prices of the calves which "grow instead of fattening" more than offset this advantage.

### A Good Feeder

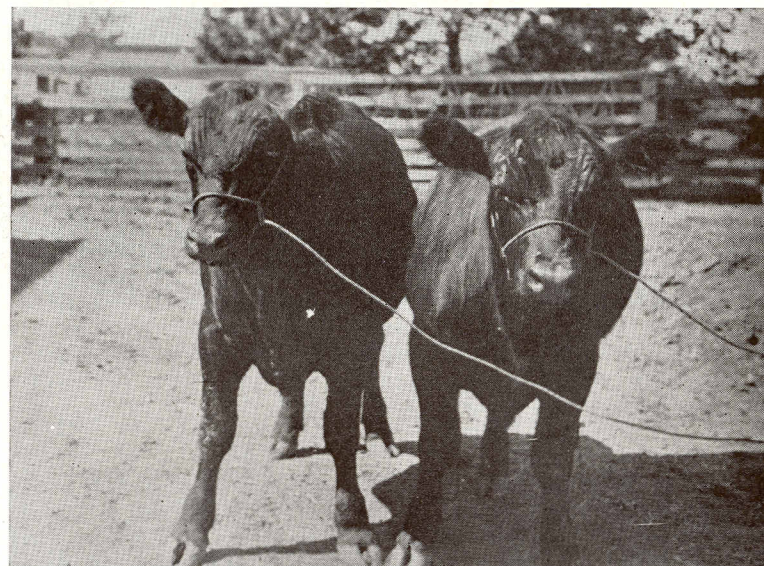
The ability to put on weight economically is largely an inherited characteristic but can be judged from outward appearance. A short, wide head, especially wide over the muzzle, a short neck, and a deep wide chest are associated with feeding quality. Usually enough emphasis is not given to heads. Not one calf in a thousand with a long, narrow head and wild disposition ever gets fat enough to show or sell well. They are poor feeders and generally equally poor individuals. O good feeder needs a very deep, wide middle without paunchiness. He has medium-sized, clean-cut bone, pliable, medium-thick hide, and a smooth coat of fine hair. These characteristics as well as firmness and smoothness of fleshing are indications of what is called quality. Quality is of importance not only to the feeder but also to the packer, because it is directly related to the attractiveness, tenderness, and flavor of the meat. A naturally quiet calf with a large placid eye has an advantage as a feeder as well as a companion for the boy or girl.

It is best to select a calf in moderate flesh. If a calf is too thin he will be slow to respond to his feed. It is easier to keep the "baby fat" on a calf than to replace it if it is lost. If a calf is used to eating grain, that is an advantage. An extremely thin calf may be stunted and incapable of making satisfactory gains. On the other hand, feeder calves can be too fat. These earlier gains are cheaper than gains after the calf is fatter. Often fat is mistaken for natural thickness, with disappointing results. Selection of partly fat calves from the

feedlot as 4-H calves is not recommended. A steer is much preferable to a bull calf. There is bound to be a setback from castration and always some risk. If a bull calf is selected he should be castrated at once; the older he gets the more the shock is and if he runs too long he will get staggy, which is a very serious fault in steers.

### A Show Calf

No one is smart enough to pick the champions eight or ten months before show but show prospects are extremely good in the characteristics just described. These are shortness of head and neck, width of chest, straightness of top and side lines, smoothness, style, and attractiveness in appearance. The kind of calf which catches your eye when you walk among a bunch has an advantage in the show ring.



*A medium and an excellent feeder. The calf at the right has a much more desirable head as it is shorter, wider, and stronger. He has a wider chest and is a lower-set calf.*

### Age and Weight

Most feeder calves leave the hands of their producers when the pastures fail in the fall, from September to November. There are more calves for sale to select from and prices are usually lower than later. Too many 4-H members delay buying calves until winter and have to play on the sympathy of the owner or pay extra to get a calf not really for sale. They also pay for weight they might have added at less cost. Those interested in baby beef clubs should make a special effort to have the clubs organized early and the calves purchased at the usual time.

Steers twelve to fifteen months of age and weighing 800 to 1050 pounds usually sell well and have made cheap gains. Experiments show that gains



are much more expensive both as cattle grow older and as they become fatter. Heifers fatten more quickly than steers and when they become excessively heavy and fat produce unattractive, wasteful carcasses. Under 900 pounds, smooth, trim heifers usually sell near the price of steers. Heavier, more "cowy" heifers sell at a sharp discount. As most 4-H members wish to market in the fall when prices are usually best for prime and choice cattle and when the finished calf can be shown at a fair if desired, steers calved in May and later and heifers calved in the fall are best to select. The time between purchase and expected marketing and the intensity of the feeding planned should be considered in deciding age and weight. Many of the most profitably fed heifers are under a year of age when sold. Most shows have age and weight requirements which should be understood by those planning to exhibit there.

### **The Purchase**

Ninety-nine per cent of 4-H calves sell at or near market price. They should all be bought so they can be sold at such prices without disappointment. Good baby beef calves should be of the quality of top feeder calves or even selected from such loads so they will be fairly priced at their value or a little premium. Every year many satisfactory calves and some winning show calves are bought at as much as two cents a pound below feeder top. 4-H calves should be well above average individuals but price and value must not be confused.

The club members, no matter how inexperienced, should be present when the calves are purchased whether they actually buy them or not. The person or committee making selections when club members do not do the buying should explain their methods and reasons to the club members. As soon as the boys and girls have learned something about judging they should buy their own calves with only whatever advice seems necessary. They will learn most by experience even if they make some mistakes.

### **Records**

A large share of the value of the club will come from records accurately kept and carefully studied. The record should start as soon as the calf is bought and run until the calf is sold. The club should set a goal of everyone keeping up records and turning in final reports. If the assistant leader or an experienced club member checks the record books at each meeting and helps those who are having trouble, difficulties will be cleared up before it is too late.

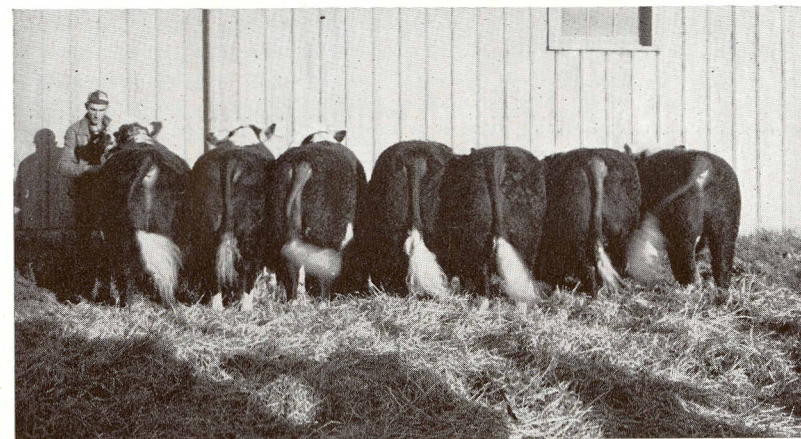
### **Feeding**

Corn and alfalfa are the most common feeds for fattening cattle in Nebraska. These feeds have been called the Nebraska standard ration. In the last few years corn production has not been nearly as high as it used to be and many stands of alfalfa have been killed by the drouth. Nebraska feeders are having to give more attention to grains which take the place of corn and to protein supplements and mineral as a partial substitute for alfalfa.

### **Starting a Calf on Feed**

Most commercial feeders who are feeding cattle during the winter months for a spring market start their cattle on a full feed of hay, gradually increasing the corn until the cattle are getting all they will consume. This is per-

haps the quickest way of getting cattle ready for market. Cattle brought to full feed in this manner ordinarily are not satisfactory feeders over a long feed of eight, ten or twelve months. A second method of starting cattle on feed is to feed hay and ground snapped corn, gradually replacing the snapped corn with ground ear corn and finally replacing the ground ear corn with shelled or cracked shelled corn. This method of starting cattle has the advantage that with the additional bulk in the grain there is much less chance of cattle going off feed. With the first method considerable skill is necessary



*4-H calves of similar breeding that developed into a uniform group.*

in bringing the cattle up to a full feed. If the cattle overeat and scour or lose their appetite it is necessary to reduce the grain feed to about half and again gradually build up the amount.

Calves can utilize considerable roughage during the early part of their feeding period. Experiments at the University of Nebraska and at the Substation at North Platte have shown that calves may be wintered on a ration made up largely of silage and after a heavy summer feed of grain produce choice beef. Silage alone is not a satisfactory ration upon which to winter calves that will be fed for the fall market. Since both corn and sorghum silage are low in protein and minerals, these essential elements must be supplied. Even though a calf is permitted to eat all the alfalfa he will take as well as silage, these needs are not entirely taken care of. The addition of from  $\frac{1}{2}$  to  $\frac{3}{4}$  pound of some high-protein supplement such as soybean meal, cottonseed meal, or linseed meal will supply the additional protein needed. If no alfalfa is available the feeding of from  $1\frac{1}{2}$  to 2 pounds of high-protein feed will supply the protein lacking in silage. The mineral needs may not be taken care of by such a ration. A simple mineral mixture such as two parts steamed bone meal, 2 parts feeding limestone, and 1 part salt may be placed where the calves can eat it, thereby avoiding any possibility of mineral shortage in this ration. If it is more convenient one-tenth pound of this mineral may be sprinkled over the calf's feed each day.

Ground fodder may be fed in place of silage. The calf will not like fodder as well as silage and will not make quite as rapid gains. From the point of



view of marketing the products of the farm, more beef can be produced per acre with silage than with fodder. This is particularly true of the sorghum, since the grain in sorghum fodder is not well digested by cattle unless it is cracked. Experiments at the Experiment Station at Lincoln show more than half again as much beef produced per acre with sorghum silage as with sorghum fodder.

Such a winter ration consisting of a full feed of silage or fodder properly supplemented is satisfactory if the calf is to be fed for a late fall market. If the calf is going to an early or mid-fall market he will not be sufficiently fat unless additional grain is fed during the winter. From four to eight pounds of grain daily should be fed, depending upon the age and fatness of the calf and the time he is to be marketed. Younger and thinner calves will require a greater grain feed than older and fatter calves, to be marketed at the same season. Following such a winter ration a full grain feed is necessary during the summer to fatten the calf.

It is impossible to keep most calves on a full feed over a long feeding period, particularly during the summer time when the heat and flies are bothering, without considerable variety in the ration. Calves fed silage or fodder during the winter are easier to keep on a grain feed than calves having a heavy grain feed during the winter. A summer fattening ration with two or even three concentrate feeds is much more attractive to the calf than one concentrate alone. In other words the addition of a high-protein feed to the summer ration of corn and alfalfa helps stimulate the appetite. A further addition of some bulky well-liked feed such as bran, ground oats, or ground barley in limited amounts is helpful. Ten per cent bran or oats, or up to 25 per cent of barley is often fed during the summer period. If a calf begins to lose interest in his feed some slight gradual change in the feed, either the addition or substitution of one of the grains or the replacement of one high-protein feed by another, may serve to bring him back to full feed.

### Feeding Hints

Rations too low in protein will not produce good results. Corn and alfalfa will produce fair to good results but the addition of about one pound daily of cotton cake, linseed meal, or similar high protein feed will increase the rate of gain, add finish, and improve the calf's appearance. This extra protein is especially needed to balance the ration late in the feeding period when a calf is, and should be, eating less alfalfa. If prairie hay, cane hay, fodder, or other low-protein roughage is fed instead of alfalfa, even fair results will not be secured unless a high-protein feed is fed. The calf will need 1½ to 2 pounds daily with such a ration.

### Some Fattening Rations

Corn .....	9 parts	} Alfalfa	Corn .....	5 parts	} Alfalfa
Oats or bran .....	1 part		Ground barley .....	5 parts	
Cotton cake .....	1 part		Cotton cake .....	1 part	
(Screening size)			(Screening size)		
Corn .....	7 parts	} Prairie or	Corn .....	4 parts	} Prairie or
Linseed meal .....	1 part		Ground barley .....	3 parts	
(Pea size)			Linseed meal .....	1 part	
		cane hay	(Pea size)		cane hay

Linseed meal may replace cotton cake if the price is nearly as low. Cracked grain sorghum may replace corn.

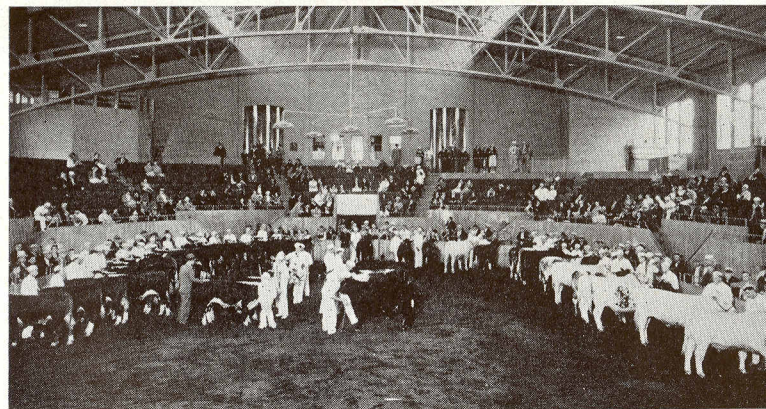
Ask your county agent for feeding circulars and reports of feeding experiments to supplement these feeding suggestions.

### "The Eye of the Master Fattens His Cattle"

The importance of good care cannot be overemphasized. Only clean, fresh feed should be given. Musty, moldy, worm-infested feed, or feed cattle have muzzled in and left should not be forced on the animal. Only disappointment can result. Feed not cleaned up two hours after feeding should be removed and not returned. Plenty of fresh, clean water should always be available for calves. This is especially important in warm weather. Salt should also be where the calf can go to it at any time. Common barrel salt is best. Regularity of feeding is a practice of almost religious observance among good feeders. Quiet, slow movements, a low voice, and a caressing hand promote the same good feeding temperament so important to success and pleasure with livestock. The calf makes best use of his feed lying down, so comfortable quarters will save feed. Many 4-H feeders have been successful in using a self-feeder after calves are on full feed. It must be watched to see that it is working and the feed is fresh. It therefore saves little or no labor, but it assures you that the calves are really on full feed.

### Care in Hot Weather

It challenges the skill of the best feeders to keep calves gaining well during the summer while heat and flies bother them. If their comfort is not given special attention satisfactory gains can not be expected. A cool, airy



*Show ring, State Fair.*

stall or shed darkened by old sacks split and hung over open windows and doors should be provided for protection from sun and flies during the day. The quarters should be absolutely clean so as not to attract flies. Strips of burlap or split sacks hung from the ceiling will permit the calf to brush off the flies. A blanket can be made of burlap as further protection from flies and it will also smooth the hair coat. Fly sprays often roughen or discolor the hair and are an unnecessary expense.



The calf should be fed when it is cool, early in the morning and late in the evening. A lot should be provided in which the calf is turned to exercise as soon as it cools off in the evening. Plenty of fresh, clean water should be where the calf can reach it easily at any time.

A moderately bulky grain ration, one with 10 per cent oats or bran or 25 per cent ground barley, is apt to appeal to a calf which has been on feed several months, more than corn as the only grain. Many showmen feel that a ration with some bran, oats, or barley will produce smoother flesh than a straight corn ration. If the corn is hard and dry, grinding it just fine enough to crack the kernels will usually increase the amount eaten and the rate of gains. Two or three pounds of hay are enough; during the latter part of the feeding period it should be limited to this. Some showmen go to considerable bother to cook barley, or they include molasses or other feed rather high priced in relation to its feed value in the ration. Such feeding methods are hardly practical and very often the results are disappointing.

### The Busy Season

As the summer months bring problems in care and feeding, they also bring problems in attendance at club meetings. The boys are busy and may fail to attend unless something extra is planned. An early evening meeting open-



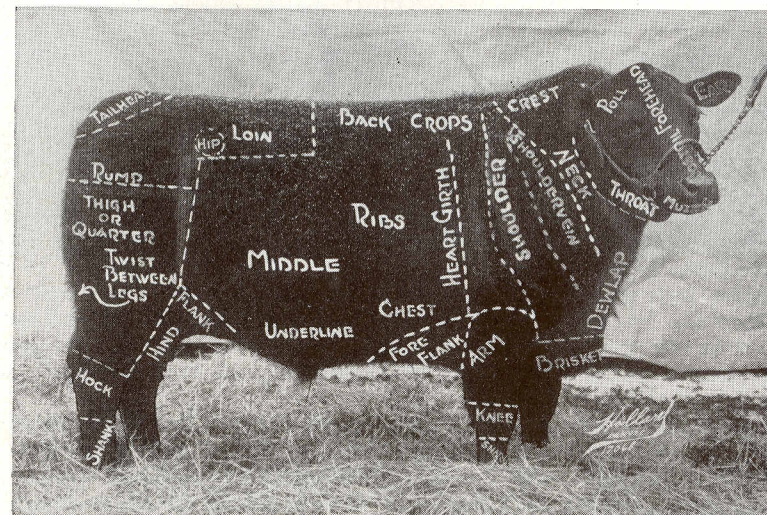
*Selection of grand champion at the Ak-Sar-Ben.*

ing with judging practice is fine. Don't forget the swim, ball game, or other fun. A tour about this time gives a fine chance to exchange ideas. Judging days and demonstration days are opportunities to get state help with two of the most valuable 4-H activities.

### Disease and Parasites

**Blackleg.**—There is no practical cure known. Calves should be vaccinated to prevent this disease.

**Lice.**—Kerosene emulsion will control either red or blue lice. To make kerosene emulsion dissolve one-sixteenth pound (about one-eighth bar) of common laundry soap in one quart of soft water by boiling. When the soap is all dissolved and the solution is still hot, pour into it two quarts of kerosene and stir the mixture vigorously. Of the resulting creamy emulsion one part is added to eight or ten parts of warm, soft water. This can be used as a spray or applied by means of a stiff-fibred brush. Another treatment is necessary in two weeks to kill lice which have hatched since the first treatment. Coal



*Illustration showing various parts of baby beef. These should be learned for judging work.*

tar or nicotine dip will be effective but is more expensive. If cattle are washed or sprayed in cold weather, it should be done in the morning and they should be kept in the open until dry.

**Scab or Mange.**—Itching which causes the calf to lick, rub, or scratch persistently is an indication of scab, lousiness, or other skin trouble. Scab is caused by an extremely small mite which may be seen against a smooth, dark surface if scraped from the affected skin with a dull knife. The skin affected becomes thickened and hardened as it rarely if ever does under other conditions. Correct diagnosis and early treatment will make the cure comparatively easy and prevent serious loss. Two dippings 10 to 14 days apart with lime-sulfur or nicotine should cure scab. If this is not effective consult U. S. D. A. Bulletin 1017 for further information.

**Ringworms** appear usually about the eyes or nose. Soften with a mixture of glycerin, three or four parts, and tincture of iodine, one part. It may be necessary to do this several times to effect a cure.



**Warts** mar the appearance of a calf. They can usually be softened away by applying castor oil or even crank-case oil every day or so. Another good method for removing large warts is to cut them off.

**Warbles or Grubs.**—It is best not to tamper with them until they make their appearance early in the spring. Then squeeze them out when they appear. Take care that they do not break beneath the surface. Apply an antiseptic. Some squeeze them out by pressing the top of a bottle down over them.

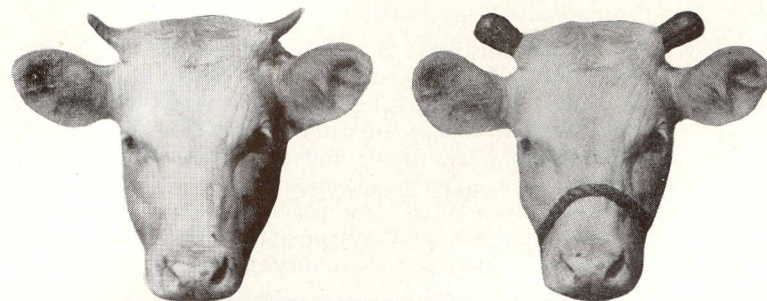
**Scours** among any but baby calves usually result from overfeeding, unclean feed, exposure, or over-heating. The feed should be reduced and prairie or other grass hays substituted for all or part of the alfalfa for a few days. In severe cases, dose with a pint of castor oil or bran mash (one gallon of bran through which hot water has been poured). Calves seldom go off feed when fed clean feeds and cared for at regular hours. White scours in new-born calves occurs from an entirely different cause. See Nebraska Experiment Station Circular 46.

**Bloat.**—Bloat is usually caused by gases formed by rapidly decomposing feed. Green, rapidly growing plants are the most common offenders. Fine leafy alfalfa or wet feed may cause bloat in calves on feed. Vigorous rubbing and kneading of the abdomen while placing the animal on an incline with its head toward the top may bring relief. When the animal shows marked distress time should not be wasted. He should be “tapped” with an instrument known as a trocar or even with a knife to permit the gases to escape. Cattle on feed which bloat regularly make unsatisfactory gains. Sometimes the condition may be corrected by replacing alfalfa with wild hay and cotton cake or by reducing the feed greatly and building up to a full feed very gradually. Bloat is discussed fully in Nebraska Extension Circular 231, which each club should study.

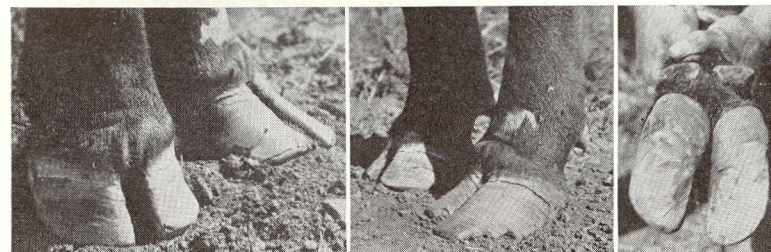
**Lumpy Jaw** is caused by a fungus that is found in many of the cultivated or wild grasses and it makes its appearance, in most instances, in the form of small, hard lumps under the skin in the region of the throat. Eventually the disease involves the jaw bone, from which it derived the name. It is most successfully treated when the lumps first appear. Surgery and some of the iodides given internally will usually bring about a cure.

### Training the Calf

Every baby beef club member wants to show his calf. Sometimes he hopes to exhibit at one of the big fairs but it is even more important to show the calf to friends, neighbors, and visitors than to strangers. The best show in the world is right out in the home yard with people who are interested in the boy or girl. Club and community fairs draw more real interest than the bigger fairs where everyone is less well known and where there are so many other things to see and do. Regardless of where they are shown, calves should look their best. The club member is proud of his four-legged friend and wants others to appreciate his real worth. To show to advantage the calf must be trained to lead well and stand squarely. The sooner the calf is broken to lead, the less trouble he is. He may be haltered and tied in his stall a few days until he gets used to the halter and knows it can hold him. Enough help should be secured to be sure the calf does not break away when he is taken out. The halter rope may be lengthened with another short rope so that one or two others can help. Do not make the mistake of putting on two



*Spiked horns and proper use of horn weights.*



*Many 4-H calves should have their feet trimmed in order to stand more naturally. The left hind foot before trimming and the right properly trimmed are shown by the pictures at the left. Right picture shows sole of foot needing trimming.*

ropes and leading from both sides. The calf should be stopped by pulling to the side and turning him, not by pulling back harder than he can pull forward. If a calf gets away he is apt to keep trying to do it again for a long time. When the calf can be led well he should be trained to stand. He will be easier to train outside his lot than where he feels too much at home. He should be accustomed to strangers and crowds, with care to prevent him from getting loose.

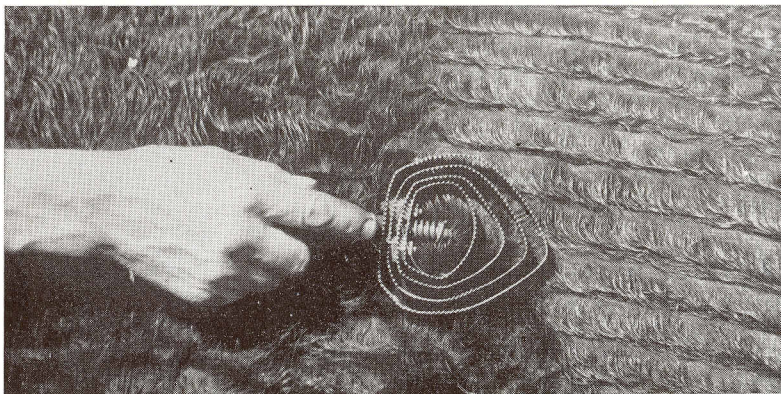
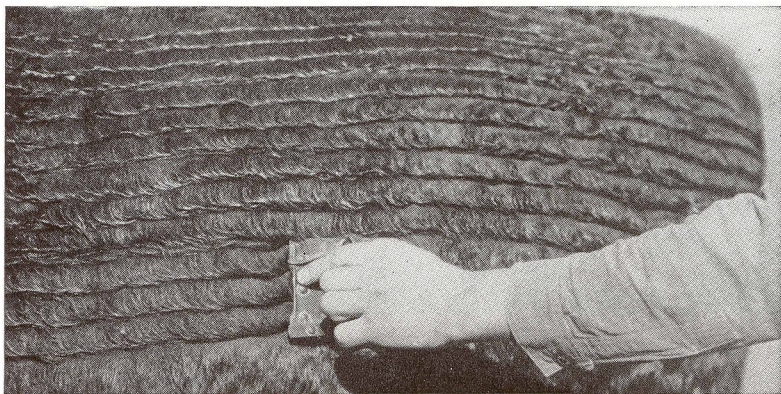
### Hair, Horns, and Hoofs

A calf must be clean and well kept, to be attractive. Clean bedding, occasional brushing, and two or three good washings with soap and water before show time will keep his coat clean and free from scurf. Horns should curve down and in to look well; if they are not this shape naturally, they will need to be trained with weights. Smoothing and polishing with a rasp, scraper, emery cloth, and a woolen cloth dampened with sweet oil add much to their appearance. If horns are not trained and polished they detract rather than add to the calf's appearance. Unless a boy is prepared to take good care of the horns, they should be removed as soon as the calf is purchased. If horns are removed be sure to get them close—so close that a half inch of skin around the base of the horn is included. This prevents the appearance of stubs. The feet should be trimmed so that the calf can walk easily and naturally; long toes hurt the appearance of too many 4-H calves. Hoofs may be smoothed and polished as horns are.



## Fairs

Fairs give a fine opportunity for 4-H members to compare results and to see the best of other boys' and girls' products. They offer an excellent opportunity to make new friends and to exchange ideas with others who have similar interests. Usually premium money and extra sale price for the calves cover show expenses. The visitors at the shows and the buyers at sales represent those who provide the show quarters, premiums, and show management. They are entitled to see calves in the best possible condition, clean, attractively decorated quarters, and prompt showy programs. Four-H members are always glad to render any courtesy possible to these friends.



*Making the curl with parallel lines.*

The art of livestock showmanship, and it is an art when developed to the perfection many 4-H boys and girls have reached, has only indirect application in beef production. Purebred livestock producers have a real need for showmanship and 4-H work has shown some boys that they were adapted to the purebred business. However, the chief justification of showmanship training in 4-H work is in advertising baby beef clubs. Many people would

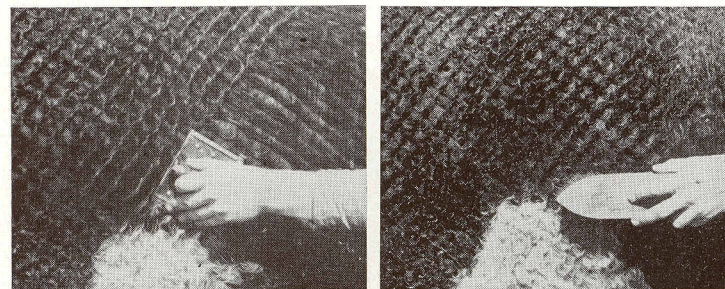
never have noticed baby beef work and learned its value had their attention not been attracted by public shows. A business-like but friendly atmosphere should mark a 4-H show. Harmless fun can be mistaken by casual visitors if the boys and girls should appear loud or rough. Every attempt should be made to give information about 4-H work and baby beef production through signs, demonstrations, conversation with visitors, and any other means at hand.

## Fitting for Show

Only animals of individual merit, clean, well groomed, and well trained will bring favorable attention to 4-H work. If for some reason a calf can not meet these standards, he should be quietly marketed, not made a public exhibit. A boy or girl planning to exhibit should select, feed, groom, and train the calf with that in mind. No amount of skill in handling a calf in the ring will take the place of months of preparation.

## Curling

Calves look wider and smoother if their hair is nicely curled. Shorthorn and Hereford calves usually have long enough hair to curl if they have been protected from the heat of the day and turned out in the cool of night. The calf is washed thoroughly with soap and water, rinsed clean, and then wet with water having a little dip in it. He is ready for the curl.



*Making the diamond curl.*

Perhaps the easiest curl is set by running straight parallel lines along his side with an ordinary curry-comb as shown. If the hair is long, a better job is done when half the bars are flattened in the comb, putting the lines twice as far apart. When the hair is very short, a curl can sometimes be set by running the lines as shown in the illustration, giving a diamond effect.

A very popular curl is made by placing the point of a round curry-comb against the body and bringing it slowly down the side, moving the wrist rapidly from side to side as shown in the picture. All these curls are completed by brushing or combing the hair up lightly. The hair on the back is usually combed to the sides to a point back of the shoulder where it swirls in all directions. From there back it may be combed back and waved with the round comb but is usually not brushed up. The hair on the face is combed in natural directions; the hair at the poll of the head combed down on the face tightly to make the head appear short. The rounds and twists are combed

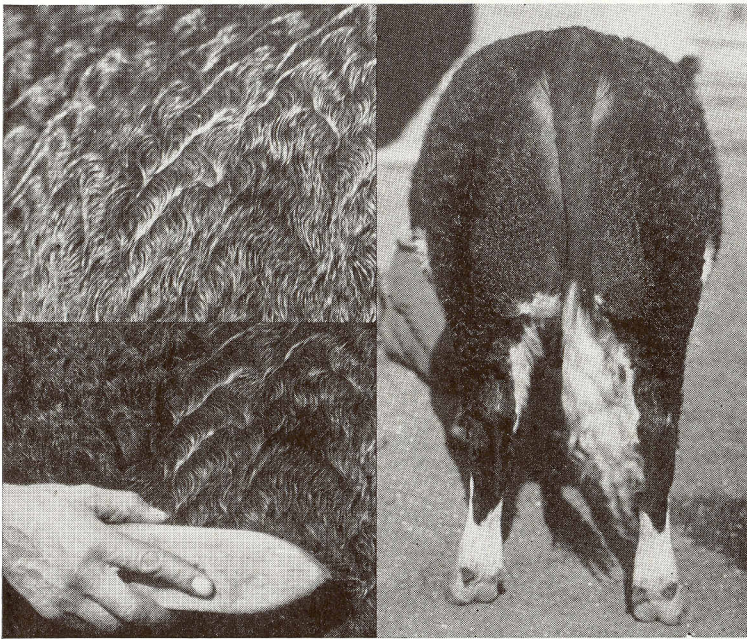


out to give the appearance of width. All but the switch of the tail should be clipped about two weeks before show. The switch may be braided wet and combed out when dry. Rubber bands hold this braid well.

Curling should be done several times to find the way each calf looks best and because the curl stays better when it is repeated. The curling should be done before the show and the calf shown dry. Angus and other short-haired cattle may be shown with their hair brushed smooth and lightly oiled with sweet oil. They usually have their heads clipped back about as far as the halter goes. Curling can best be learned by watching and practicing. Some experienced person should explain how it is done.

### In the Ring

The judge expects a calf to show at his best. Calves should be ready to come into the ring when the class is called; that is only courtesy to the manage-



*The curl with the round comb. The curve in the top line of calf at right is due to incorrect show position.*

ment of the show and other exhibitors and is sure to make a better impression with everyone than to delay the judging. At the larger shows there is usually a ringmaster who will show exhibitors where to put their calves and direct them to move as the judge wishes. The show will be much more attractive to the spectators if everyone is alert to move when and as directed and tries to keep in line. Showmen should watch their calves and the ringmaster all of the time—they may be signaled when they least expect it and then, too, the judge is looking for calves out of position in order to see their faults. If

possible the calf's front feet should be as high as his back feet or higher, and he should stand squarely with his back straight and his head alert. A show stick about four feet long with a nail through the end will help place the calf's feet and may be used on his underline or tail head to bring his back line straight. Training with this stick is more valuable than rough use at show time. The calf is led from the left side, with the lead rope in the right hand about one foot from the halter. It is preferable to walk facing forward. Good showmen make room for other showmen and accept the judge's decision like gentlemen no matter how disappointed they are. The class is usually paraded from the ring in the order placed. Extension Circular 0-23-2 gives more information on showing.

### Shipping

The grain ration should be reduced before shipping. There will be less shrink if alfalfa is replaced with prairie hay or straw and the grain ration with oats a day before shipping. Do not salt excessively or withhold water. If this is done the calves will overfill, scour at the show or market, and possibly bloat. Let the animal drink when it reaches its destination; at shows gradually resume the usual ration. Some truckers handle stock roughly or carelessly;



*A good-type 4-H calf.*

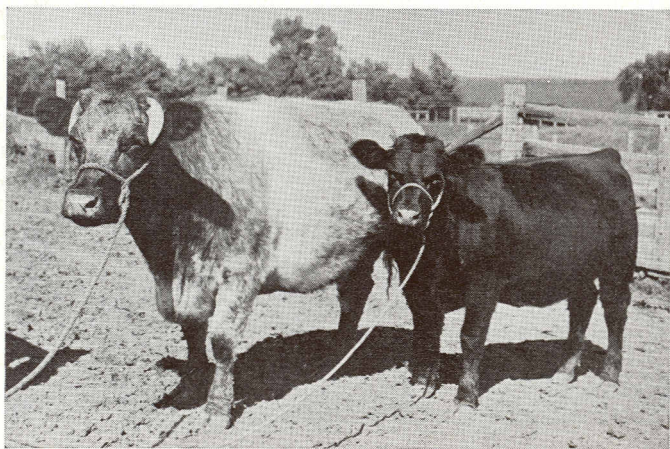
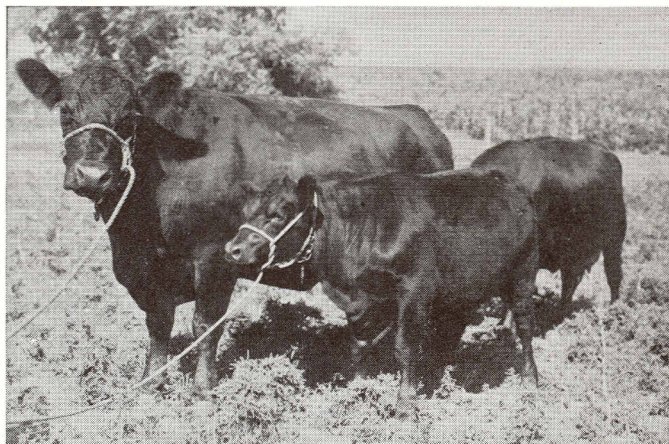
they should not be trusted with 4-H calves. Proper bedding is important. Clean, wet sand is good in hot weather; straw and sand in cold weather.

### Finish Up

Much of the value of 4-H work is lost if it is not brought up to a good strong close. The record books should all be complete; they should be studied and compared carefully. Final reports should be made by all members. If the year was a success, it is a pleasure to get results in definite form and to celebrate and tell the community about your good year at an achievement day. If things did not go so well, there are reasons. The agricultural agent and



county committee members can help you find them. Study of the records, visits to other clubs, and a mental review of the year will help plan for greater success next year. The close of the year is the time to organize so that plans for next year can be well made.



*Many older experienced baby beef boys are building herds. Pictures show the right kind of foundation stock of the Angus and Shorthorn breeds.*

### **A Sound Program**

The "in and out" has no place in the cattle business or in the 4-H baby beef club. A practical workable system of cattle production should be developed from all the information and experience available and carried on through the years in a courageous manner.

Boys may wish to feed an increasing number of calves each year as their experience and capital increase.